

## *Roadside Emissions Survey*

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The California Department of Consumer Affairs/Bureau of Automotive Repair (DCA/BAR) and California Highway Patrol (CHP) conduct the state's roadside vehicle emissions survey. The survey's purpose is to provide a "real world" profile of emissions from California's cars and trucks. The data is used to help measure California's Smog Check program by determining statewide emissions levels and monitoring those levels over time. In addition, the survey is necessary to demonstrate to the U.S. Environmental Protection Agency that California's Smog Check program meets federal emissions reduction requirements for ozone-forming pollution generated by motor vehicles. The study also evaluates various emissions testing procedures. California motorists have been participating in state-operated roadside emissions surveys since 1972.

The study is conducted in phases by four teams, who together visit over 300 locations around the state every year. The sites are chosen by first randomly selecting ZIP codes and then determining sites that are safe for conducting the tests.

At each site, one lane of traffic is coned off for testing equipment. A CHP officer directs randomly-selected vehicles to that lane.

Motorists whose vehicles are selected for testing are greeted by a BAR representative who provides them with information about the survey's purpose and answers any questions they might have. Although participation in the survey is not mandatory; it is critical to the success of the survey. The BAR representative will do everything possible to accommodate motorists who are selected for the survey.

The emissions survey tests vehicles on a treadmill-like device called a dynamometer that is now being used to conduct Smog Check inspections in the state's smoggiest regions. By simulating driving conditions, dynamometers provide the most accurate emissions readings for hydrocarbons (HC), carbon monoxide (CO), and oxides of nitrogen (NO<sub>x</sub>).

Vehicles are tested solely for the purpose of gathering data. They do not "pass" or "fail" the roadside emissions tests, so these tests add no additional repair requirements for drivers of high-polluting vehicles. The procedure usually lasts less than 10 minutes.

At the conclusion of each test, the driver receives a Vehicle Inspection Report (VIR) detailing the results. The report may **not** be substituted for a vehicle's official Smog Check.

In some locations, vehicles may also pass by a Remote Sensing Device (RSD), which uses infrared technology to measure vehicle emissions. The data gathered from the RSDs at these sites is also used only for research purposes.